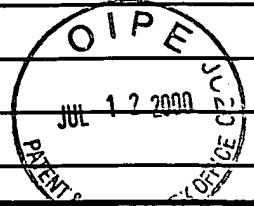


Form PTO-1449

**INFORMATION DISCLOSURE CITATION
IN AN APPLICATION**

(Use several sheets if necessary)

Docket Number (Optional)
PHA-003.01(21701-301)Application Number:
09/406,184Applicant
Alberte, R. S. and Zimmerman, R.Filing Date
September 23, 1999Group Art Unit
1755
U.S. PATENT DOCUMENTS

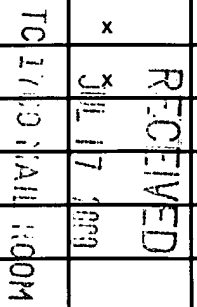
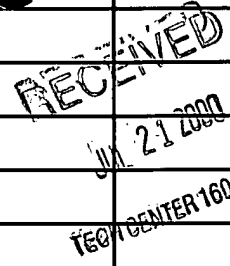
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	INVENTOR NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
J	AA 5,695,552	12/9/97	Taylor	106	15.05	2/13/97
J	AB 5,663,215	9/2/97	Milligan	523	122	4/18/96
	AC 5,607,741	3/4/97	Zimmerman et. al.	428	68	12/8/94
	AD 5,550,202	8/27/96	Tai et. al.	526	286	4/11/94
	AE 5,521,012	5/28/96	Aklian et. al.	428	418	5/15/95
	AF 5,403,390	4/4/95	Spera et. al.	106	15.05	3/11/94
	AG 5,397,385	3/14/95	Watts	106	18.32	3/28/94
	AH 5,384,176	1/24/95	Zimmerman et. al.	438	68	12/11/92
	AI 5,358,749	10/25/94	Fears	427	397.7	1/31/94
	AJ 5,354,603	10/11/94	Errede et. al.	428	240	1/15/93
	AK 5,331,074	7/19/94	Slater, deceased et. al.	528	14	01/28/91
	AL 5,304,236	4/19/94	Fears	106	15.05	4/22/92
	AM 5,284,682	2/8/94	Martin	427	386	9/3/92
	AN 5,259,701	11/9/93	Gerhart et. al.	405	216	10/22/92
	AO 5,248,221	9/28/93	Gerhart et. al.	405	216	10/22/92
	AP 5,236,493	8/17/93	Hunter et. al.	106	16	4/12/91
	AQ 5,143,545	9/1/92	Stiffey et. al.	106	15.05	9/20/91
	AR 5,081,165	1/14/92	Inukai et. al.	522	182	4/14/89
	AS 5,064,579	11/12/91	Kendall et. al.	264	22	5/29/90
	AT 5,017,322	5/21/91	Brooks	264	255	2/14/89
	AU 5,008,146	4/16/91	Keohan	428	328	10/10/89
	AV 4,947,785	8/14/90	Milne	114	357	12/28/88
	AW 4,908,061	3/13/90	Nanishi et. al.	106	18.31	8/30/88
	AX 4,851,166	7/25/89	Kendall	264	22	10/31/88
	AY 4,814,209	3/21/89	Arnold	427	409	10/30/87
	AZ 4,752,629	6/21/88	Proudlock et. al.	523	122	5/2/86
	BA 4,675,051	6/23/87	Baxter	106	16	4/29/86
	BB 4,670,481	6/2/87	Foscante et. al.	523	122	2/14/86
	BC 4,654,380	3/31/87	Makepeace	523	122	6/5/85
J	BD 4,531,975	7/30/85	Salome	106	18.3	1/25/84

BE	4,426,464	1/17/82	Sghibartz	524	122	6/29/82
BF	4,407,997	10/4/83	Sghibartz	524	202	10/21/81
BG	4,385,134	5/24/83	Foscante et. al.	523	177	10/19/81
BH	Re. 30,909	4/20/82	Law et. al.	71	67	2/15/80
BI	4,311,629	1/19/82	Gysegem	260	33.6	11/12/80
BJ	4,298,543	11/3/81	Law et. al.	260	429.7	2/19/80
BK	4,261,915	4/14/81	Law et. al.	260	429.7	2/19/90
BL	4,227,929	10/14/80	Law et. al.	106	1.17	12/8/77
BM	4,191,579	3/4/80	Hails et. al.	106	15R	10/12/77
BN	4,139,515	2/13/79	Dennington	260	29.6	2/13/79
BO	4,080,190	3/21/78	Law et. al.	71	67	8/26/76
BP	4,025,693	5/24/77	Milne	428	447	12/17/75
BQ	4,021,392	5/3/77	Milne et. al.	260	28.5	3/26/75

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER		DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
BR	WO 99/37723	/	7/29/99	PCT				x
BS	WO 99/05912	/	2/11/99	PCT				x
BT	WO 99/05228	/	2/4/99	PCT				x
BU	WO 98/53015	/	11/26/98	PCT				x
BV	WO 98/39391	/	9/11/98	PCT				x
BW	WO 98/29580	/	7/9/98	PCT				x
BX	WO 98/17733	/	4/30/98	PCT				x
BY	WO 98/17732	/	4/30/98	PCT				x
BZ	WO 97/49771	/	12/31/97	PCT			x	
CA	WO 97/44401	/	11/27/97	PCT			x	
CB	WO 97/13888	.	4/17/97	PCT				x
CC	WO 97/12903		4/10/97	PCT				x
CD	WO 97/09356	.	3/13/97	PCT				x
CE	WO 94/13462	o	6/23/94	PCT				x
CF	WO 93/06881	!	4/15/93	PCT				x
CG	WO 92/07023	'	4/30/92	PCT				x
CH	EP 0 931 818 A1	/	8/3/98	EPO			x	
CI	EP 0 825 203 A1	'	8/8/97	EPO				x
CJ	EP 0 903 389 A1	/	6/2/97	EPO			x	
CK	EP 0 851 009 A2	,	5/9/97	EPO			x	
GL	EP 0 841 353 A1	'	11/7/96	EPO				x

7	CM	EP 0 849 290 A1	9/6/95	EPO			x	
1	CN	EP 0 849 289 A1	9/6/96	EPO			x	
2	CO	EP 0 852 251 A1	9/4/96	EPO			x	
	CP	EP 0 847 404 B1	8/9/96	EPO			x	
	CQ	EP 0 775 733 A1	5/31/96	EPO			x	
	CR	EP 0 811 669 A1	2/16/96	EPO			x	
	CS	EP 0 789 731 B1	11/3/95	EPO			x	
	CT	EP 0 779 304 A1	8/14/95	EPO			x	
	CU	EP 0 698 643 A2	8/3/95	EPO			x	
	CV	EP 0 671 446 A2	2/28/95	EPO				x
	CW	EP 0 639 600 B1	8/19/94	EPO			x	
	CX	0 633 031 A1	6/23/94	EPO			x	
	CY	0 608 131 A1	1/20/94	EPO			x	
	CZ	0 593 284 A1	10/13/93	EPO			x	
	DA	0 651 034 A1	7/5/93	EPO			x	
	DB	0 564 275 A1	3/31/93	EPO			x	
	DC	EP 0 550 998 B1	12/21/92	EPO			x	
	DD	0 530 205 B1	4/9/91	EPO				x
	DE	0 532 273 A1	9/9/92	EPO				x
	DF	EP 0 506 782 B1	12/21/90	EPO				x
	DG	0 489 998 A1	12/13/90	EPO			x	
	DH	0 364 271 B1	10/12/89	EPO				x
	DI	0 529 693 B1	10/12/89	EPO				x
	DJ	0 364 272	10/12/89	EPO				x
	DK	0 343 897	5/22/89	EPO				x
	DL	0 337 474 B1	4/14/89	EPO			x	
	DM	0 247 019 B1	5/8/87	EPO			x	
	DN	0 234 822 A1	2/13/87	EPO			x	
	DO	0 201 279 B1	5/1/86	EPO			x	
	DP	0 077 666 A1	10/18/82	EPO			x	
	DQ	0 051 810 A1	10/28/81	EPO			x	
	DR	6513952	05/02/66	Nederland				x
	DS	2 306 491 A	05/07/97	UK Patent				x
	DT	DE 27 38 026 A1	03/02/78	German				x
	DU	61115971 A	06/03/86	Japanese Patent			x	
1	DV	1,124,297	08/21/68	UK Patent				x



OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

J	DW	Anthony S. Claire, "Marine Natural Product Antifoulants; Status and Potential", Biofouling 9 (3) : 211-229 (1996)
J	DX	Donald S. Sundberg et. al.; "Selection, Design and Delivery of Environmentally Benign Antifouling Agents", Naval Research Review, pp. 51-59 (Four/ 1997).
J	DY	James S. Todd et. al.; The Antifouling Activity of Natural and Synthetic Phenolic Acid Sulphate Esters; Phytochemistry Vol 34, No. 2 pgs 401-404. (1993).
J	DZ	International Research Report (mailed on March 3, 2000)
J	EA	Written Opinion (mailed on June 21, 2000)
EXAMINER		DATE CONSIDERED 8/03
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.		

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



RECEIVED
JUL 17 2000
TC 1700 MAIL ROOM